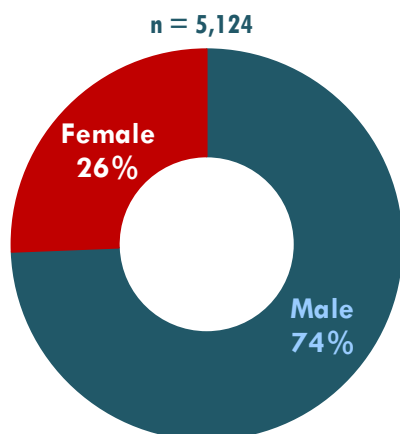


Nationally, it is estimated that one in 139 women will be diagnosed with HIV at some point in her lifetime. In 2009, women represented 24% of all new HIV disease diagnoses among US adults and adolescents in the 40 states with established confidential name-based reporting. Hispanic and Black women continue to be disproportionately affected at all stages of HIV compared to non-Hispanic White women and women of other races/ethnicities. The rate of new HIV infections in 2009 among Black women was 15 times that of White women, and over 3 times that of Hispanic women. Most women are infected through heterosexual sex and injection drug use. Prevention challenges for women include gender inequality affecting the ability to negotiate condom usage, sexual violence, alcohol and drug use, presence of other sexually transmitted diseases that increase the likelihood of acquiring or transmitting HIV, limited knowledge about HIV/AIDS, and various socioeconomic issues such as poverty and lack of adequate health care (CDC, 2011; Hodder, 2010).

Consistent with national trends of HIV disease, slightly more than one quarter (26%) of HIV disease diagnoses in Virginia between 2005 and 2009 were among women. The number of HIV disease diagnoses has fluctuated in recent years for women, with an average of 263 cases diagnosed per year (range = 218-303), at an average rate of 6.7 per 100,000 population.

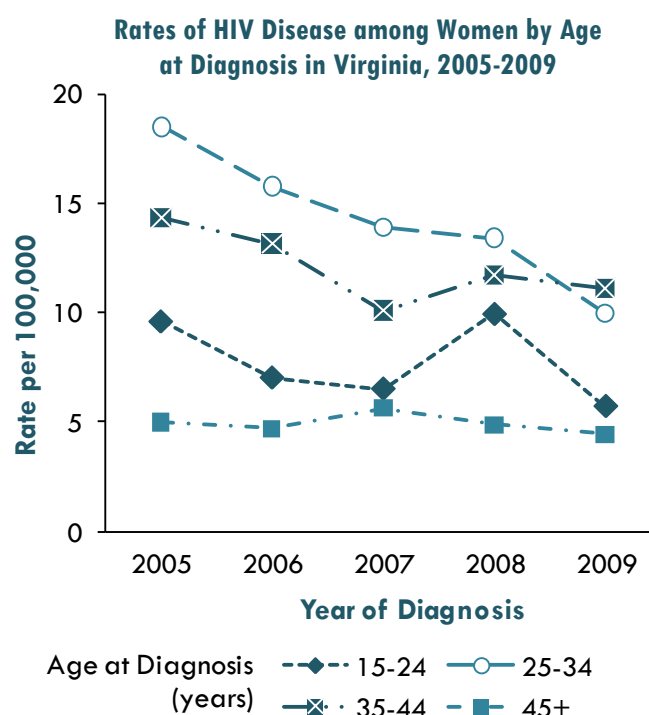
HIV Diagnoses by Gender in Virginia, 2005-2009



HIV DISEASE DIAGNOSES

By Age at Diagnosis

The age of diagnosis for HIV-infected women in Virginia has fluctuated over the past 5 years. The highest rates of diagnosis in 2009 were among those aged 25-34 and 35-44 (10 and 11.1 per 100,000, respectively). The rate among the 15-24 age group decreased from 10 per 100,000 in 2008 to 5.7 per 100,000 in 2009, but the decline is not expected to continue in 2010 as data from recent years showed annual fluctuations in all trends.



Between 2005 and 2009, the rate of HIV disease diagnoses for both non-Hispanic Black and White women peaked between the diagnosis ages of 25 and 34. However, the rate for Black women (50 cases per 100,000) was more than 17 times higher than that of their White counterparts (2.9 per 100,000)†.

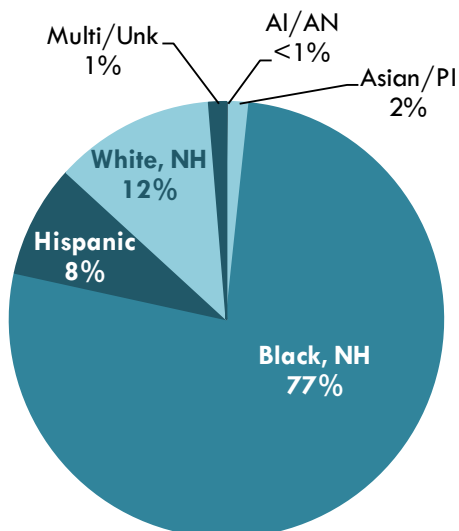
For every 8 women in Virginia diagnosed with HIV disease, approximately:

- 6** are Black
- 7** are exposed through heterosexual contact
- 4** are aged 25-44 at diagnosis

By Race/Ethnicity

There are significant racial and ethnic disparities with regard to HIV disease. While only accounting for 14% of the US female population, Black women make up two-thirds of new infections among women in the US (Hodder, 2010). The rate of HIV diagnosis among Black women in Virginia between 2005 and 2009 ranged from 20-30 cases per 100,000, reaching as high as 50 per 100,000 among particular age groups. In comparison, the rate for Hispanic women ranged between 6-13 per 100,000 during these 5 years and the rate for White women was approximately 1 per 100,000. Cases of HIV disease among women of other races and ethnicities remain low.

HIV Disease among Women by Race/Ethnicity in Virginia, 2005-2009 (n=1,321)^



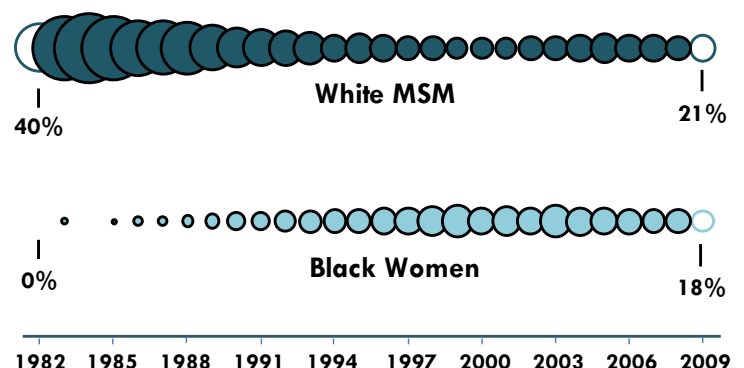
Between 2005 and 2009, White and Black females comprised the vast majority of new diagnoses of HIV disease among women (89%). Among recent HIV disease diagnoses in the 5-year period, 77% of women were Black, compared to 56% of men; 12% were White, compared to 31% of men; and 8% of newly infected women are Hispanic, similar to 9% among men.

- **Black women are 21 times more likely to be diagnosed with HIV disease than White women**
- **Hispanic women are 8 times more likely to be diagnosed than White women**

HIV/AIDS among Black Women

Since the first diagnosed case in 1982, HIV disease in Virginia has most predominantly been among men who have sex with men (MSM), including those with a history of injection drug use (MSM-IDU), but Black women are increasingly bearing the burden of the epidemic. The figure below is scaled by each group's percentage of total cases of HIV disease for that year*. In 1983, there were 3 cases of HIV diagnosis among Black females (6% of all HIV cases), followed by only 1 case in 1984. Comparatively, White MSM (including MSM-IDU) represented 40% of all HIV cases in 1982, 53% in 1983, and an all-time high of 58% of the total number of HIV disease diagnoses in 1984. From 1997 to 2004, Black women represented a larger annual proportion of all HIV disease diagnoses compared to White MSM. Since then, the two groups have maintained similar annual percentages at approximately 20% each.

HIV Disease Diagnoses among White MSM and Black Women as Proportions of Total Cases in Virginia, 1982-2009



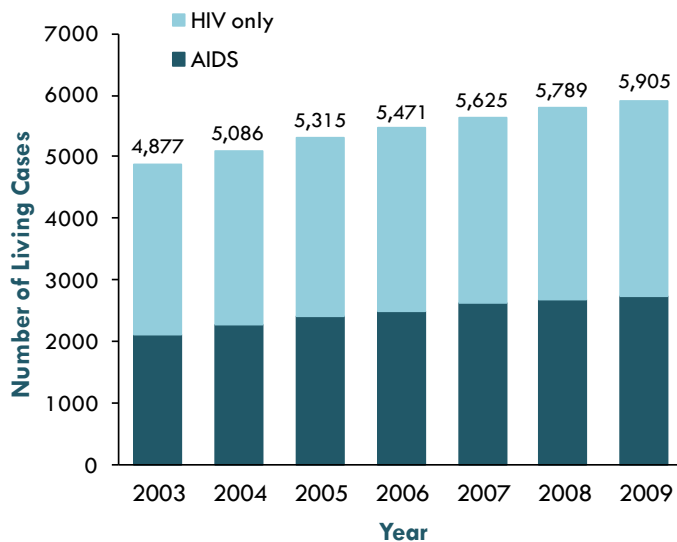
By Transmission Category*

In 2005-2009, 87% of all HIV disease diagnoses among women in Virginia were attributed to heterosexual transmission. Some women may be unaware of their male partner's risk factors for HIV disease such as unprotected sex with multiple partners, sex with men, or injection drug use (CDC, 2011). To date, there has been no confirmed cases of HIV transmission through female-to-female sexual contact. Women who only have sex with women and who have no other risk factors, such as injection drug use, are at a very low risk for HIV disease (CDC, 2006).

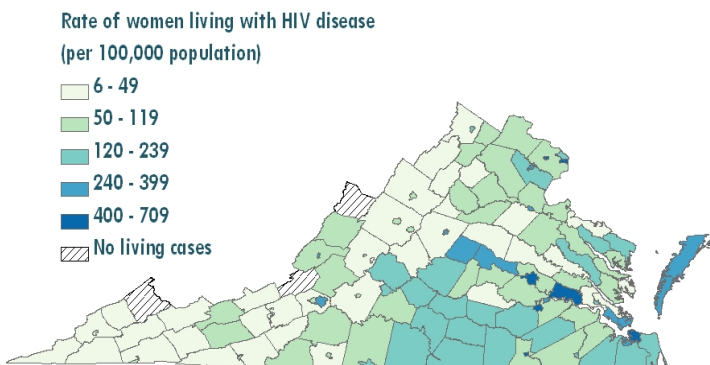
HIV/AIDS PREVALENCE

As of December 31, 2009, there were 5,905 women living with HIV disease in Virginia, 46% of whom had progressed to AIDS. Women comprised 26% of all people living with HIV disease and one in 679 women in Virginia were known to be living with HIV disease at the end of 2009.

Women Living with HIV Disease in Virginia, 2003-2009



Prevalence among Women by Locality, 2009

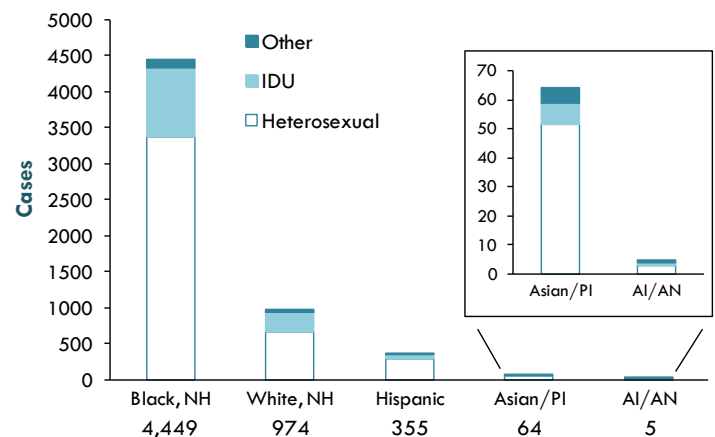


Prevalence by Transmission Category*

Virginia women living with HIV disease at the end of 2009 were most likely exposed to HIV through heterosexual transmission. The reported percentages of heterosexual transmission for Black, White, and Hispanic women living with HIV disease were similar (76%, 68%, and 82% respectively). Transmission through injection drug use (IDU) is more likely to be reported by White women (28%) than Black or Hispanic women (22% and 14%, respectively).

However, the disparity by race/ethnicity was significant when comparing prevalence among these three groups. At the end of 2009, the prevalence of Black women infected through heterosexual contact was one in 244, nearly 4 times that of Hispanic women (one in 918) and more than 16 times higher than White females (one in 4,059). The trend was similar among women in the IDU transmission category: Black women in Virginia were 6 and 12 times more likely to be living with HIV disease than their Hispanic and White counterparts.

Women Living with HIV Disease by Transmission Category and Race/Ethnicity in Virginia, 2009*



AIDS DIAGNOSIS

In Virginia, women accounted for approximately 25% of the 1,756 AIDS diagnoses from 2005-2009, similar to the national proportion. Among the 438 cases, 330 (75%) occurred in Black women, 51 (11.6%) were in Hispanic women, and 41 (9%) were in Whites. In contrast, five percent of all AIDS diagnoses among men during this five year period were Blacks, 13% were Hispanics, and 32% occurred in Whites. Nationwide, CDC reported a 15% increase in AIDS cases among women from 1999 to 2003 while the increase among men was only 1% (Hodder, 2010). In addition, death attributed to HIV infection among women of color is disproportionately high: HIV/AIDS was among the top 10 leading causes of death for Black females aged 10-54 and Hispanic females aged 15-54 in 2000-2007 (CDC, 2011).

SEXUAL ABUSE & HIV RISK

Sexual violence and abuse toward women are widespread. Studies suggest that 20-33% of all women in the US will be physically assaulted by a partner or ex-partner during their lifetime. Compared to the general population, the prevalence of domestic violence is much higher among HIV positive women and those at risk for HIV (Cohen, 2000). Research also reports an association between sexual abuse during childhood and HIV infection, suggesting that those who suffered abuse as children may be predisposed to participate in risky behaviors that place them at risk for HIV (Vlahov, 1998).

Cohen and colleagues conducted a longitudinal study to assess the prevalence of domestic violence in HIV positive and high-risk women and how history of childhood abuse might affect HIV-related risk behavior (Cohen, 2000). Among 1,645 participants in six locations, the authors found that compared to women without histories of abuse, those reporting abuse were more likely to have used drugs at some point in their lives, to have had a male or female partner who was at risk for HIV infection, to have had more than 10 lifetime male partners, and to have been forced to have sex with someone known to be HIV positive. In addition, those who reported childhood sexual abuse were more likely to report a lifetime history of domestic violence and to have experienced abuse from their partner in the past year.

Overall, women infected with HIV and high-risk women were equally likely to have experienced any domestic violence (66%), recent abuse (25%) or childhood sexual abuse (~30%). The study showed that the rates of abuse did not vary significantly by race/ethnicity, education, or marital status. But women who have been victims of domestic violence were less likely to be living with their spouse or partner, employed, or living on their own.

This and other similar studies support the fact that early exposure to violence, such as childhood sexual abuse, leads to greater risks of experiencing

other violence and participating in high-risk behaviors. Thus, HIV prevention and care services, with the help of domestic violence service providers, need to address the possibility of violence in women's lives and promote behavior changes among those who experience violence in order to reduce risk and improve their health (Cohen, 2000; Vlahov, 1998).

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- †Small case counts among White females by age group may result in unreliable rate estimates.
- ^Asian/PI—Asian/Pacific Islander; AI/AN—American Indian/American Native; Multi/Unk-Multiple Race/Unknown race.
- *Transmission category data (MSM, MSM-IDU, Heterosexual, IDU, etc.) are not actual cases; the percentages presented are estimates of the transmission category using the CDC provided multiple imputation procedure for cases reported without an identified or reported risk.